Amendments to the Specification:

Please amend the paragraph at page 5, lines 8-13 as follows:

Generally, in a light receiving element of an optical apparatus, a peripheral light intensity loss as conceptually indicated in FIG. 11 occurs. This is so-called ~~cosine biquadratic law~~ cosine-to-the-fourth or lens ~~aperture contact~~ vignetting, that is the phenomenon to decrease the receiving light quantity as the incident angle increases.

Please amend the paragraph at page 7, lines 6-18 as follows:

To achieve the above-mentioned object, ~~the present invention provides~~ an optical gain correction filter is provided, which has a multilayer film structure formed by stacking a plurality of thin films with different ~~diffractive indexes~~ refractive indices on a light transmitting board, wherein when a light with the wavelength λ enters at the incident angle θ, the transmissivity is assumed to be T1 (λ, θ) $(0 \leq T1\ (\lambda, \theta) \leq 1)$, and the thickness of each thin film is set to increase the transmissivity T1 (λ, θ) when the incident angle θ increases close to the predetermined maximum incident angle θmax with respect to the incident light with the wavelength λ_0 entering the multilayer structure.

Please amend the paragraph at page 8, lines 2-14 as follows:

~~Further, the present invention provides~~ In addition, an optical gain correction filter is provided, which has a multilayer film structure formed by stacking a plurality of thin films with different ~~diffractive indexes~~ refractive indices on a light ~~emitting~~ reflecting board, wherein when light with the wavelength λ enters at the incident angle θ, the reflectivity is assumed to be R1 (λ, θ) ($0 \leq$ R1 (λ, θ) $\leq$ 1), and the thickness of each thin film of the multilayer film structure is set to increase the reflectivity R1 (λ_0, θ) when the incident angle θ increases close to the predetermined maximum incident angle θmax with respect to the incident light with the wavelength λ_0 entering the multilayer structure.

Please amend the paragraph at page 22, lines 10-21 as follows:

The optical gain correction filter 20 is formed to be a multilayer film structure formed by stacking a plurality of thin films with different ~~diffractive indexes~~ refractive indices on the reflection surface (board) of the reflector mirror 11, and the thickness of each thin film is set to increase the reflectivity R1 (λ_0, θ) when the incident angle θ increases close to the predetermined maximum incident angle θmax with respect to the incident light with the wavelength λ_0, assuming that the reflectivity is R1 (λ_0, θ) ($0 \leq$ R1 (λ, θ) ≤ 1) when the light with the wavelength λ enters at the incident angle θ.

Please amend the paragraph at page 23, lines 16-26 as follows:

The dielectric multilayer film in the first embodiment is SiO_2 or TiO_2, but is not restricted to these materials. So-called high ~~diffractive~~ refractive index materials, for example, CeO_2, ZrO_2, Ta_2O_5, ZnS can be used instead of TiO_2. So-called low refractive index materials, for example, MgF_2 can be used instead of SiO_2. It is also possible to use intermediate refractive index materials such as Al_2O_3 and SiO. It is also possible to optimize the ~~diffractive~~ refractive index by using a material which includes at least one of the above materials.